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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,677	05/15/2001	Hideyuki Yano	35.C15360	8069

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EXAMINER

GRAINGER, QUANA MASHELL

ART UNIT PAPER NUMBER

2852

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/854677

Applicant(s)

Yano

Examiner

Quana Grainger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 10/16/2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 5, 7-25, 30-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-25, 30-31 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 7-13, 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment( )

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 11-13, and 32/1 are rejected under 35 U.S.C. 102(a) as being anticipated by Hayashi et al. (JP2001-117390A) in view of Kondo et al. (EP 0 962 667).

The image forming apparatus by Hayashi et al. comprises an image bearing member (100 or 101) for bearing a toner image; a conveying member (110) for bearing and conveying a recording material; and a transferring member (105) for transferring a toner image on said image bearing member to the recording material conveyed by said conveying member by being applied a voltage, wherein said transferring member has ion conductivity (abstract). A number of said image bearing members and the number of said transferring member are plural respectively, corresponding to plural color toners, and said image bearing member and said transferring member oppose each other via said conveying member. The plural image bearing members and

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said plural transferring members are arranged in a conveying direction of said conveying material, and plural color toner images are transferred on a recording material one after another by a conveyance of said conveying member. The conveying member has an endless shape, such as belt and the transferring member is a roller. Hayashi et al. does not teach that the transfer roller has surface roughness.

Kondo et al. teaches a transfer roller having a rough surface of 10 microns. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Kondo et al. with the image forming device of Hayashi et al. to obtain a transfer roller having superior durability that can be easily produced. (page 3, lines 6-15).

3. Claims 1, 5, 10-13, and 32/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Imamiya in view of Kondo et al.. Nakamura teaches an image forming apparatus comprising an image bearing member for bearing a toner image; and a transferring member for transferring a toner image on said image bearing member to the recording material conveyed by said conveying member by being applied a voltage, wherein said transferring member has ion conductivity. The transferring member is above the transfer sheet and does not convey the sheet. Nakamura does not teach a conveying member for bearing and conveying a recording material. Imamiya teaches an image forming apparatus comprising an image bearing member for

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bearing a toner image; a conveying member for bearing and conveying a recording material; and a transferring member for transferring a toner image on said image bearing member to the recording material conveyed by said conveying member by being applied a voltage. The image forming apparatus, further comprising developing means for developing a latent image on said image bearing member by a reversal developing method (column 4, lines 37-49). The transferring member has a sponge at least on surface thereof (column 6, lines: 16-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Imamiya with the image forming device of Nakamura to always obtain a substantially uniform electric field at the transfer nip (Imamiya; purpose: lines 1-6) Nakamura does not teach that the transfer roller has surface roughness.

Kondo et al. teaches a transfer roller having a rough surface of 10 microns. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Kondo et al. with the image forming of Imamiya to obtain a transfer roller having superior durability that can be easily produced. (page 3, lines 6-15).

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nakamura in view of Imamiya in view of Kondo et al. and further in view of Ogawahara et al. Nakamura does not teach a double-sided mode.

Ogawahara et al. teaches an image forming apparatus wherein said image forming

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apparatus has a double-side mode for forming images on both sides of a recording material. The image forming apparatus has a resin mode for forming an image on a recording material made of resin and the recording material made of resin has light permeability (column 11, lines 23-37).

The image forming apparatus, further comprising developing means for developing a latent image on said image bearing member by a reversal developing method (column 6, lines 50-66).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Ogawahara et al. with the image forming device of Nakamura to always obtain good fixing performance (Ogawahara et al.; column 3, lines 59-67).

#### ***Prior Art of Record***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Publication JP 11-65318 teaches a transfer roller having a roughened surface.

#### ***Allowable Subject Matter***

6. Claims 14-25 and 30-31 are allowed.

#### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quana Grainger whose telephone number is

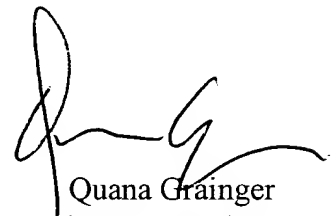
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703-308-7616. The examiner can normally be reached on weekdays between the hours of 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on 703-308-1373. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3431.



Quana Grainger  
Primary Examiner  
Art Unit 2852

QG  
January 5, 2004